REMARKS/ARGUMENTS

Claims 23, 25-28 and 33, and 35-42 are active in this application.

The specification is amended to disclose the names of the parties to the joint research agreement.

No new matter is believed to have been added.

The rejections under 35 USC 103(a) over the references of Farwick-1, Farwick-2, Farwick-3, Farwick-4, Farwick-5, Burke-1, Burke-2, Burke-3, Burke-4, Burke-5, Hans, Nampoothiri-i, Nampoothiri-2, Nampoothiri-3, Nampoothiri-4, Mockel-1, Mockel-2, Mockel-3, Dusch, Wehmeier, Dunican-i, Dunican-2, Dunican-3, Dunican-4, and Dunican-5 combined with the previously cited Kramer, Grabau, Chang and Chang are respectfully traversed because:

(1) the subject matter of the cited patents and publications as well as the claimed invention were, at the time the claimed invention was made, owned or subject to an obligation of assignment to Evonik, formally Degussa AG or

(2) subject to a joint research agreement that was in effect on or before the date the claimed invention was made, the claimed invention was a result of that agreement, and the parties are so named.\

The inventors Farwick, Hans and Möckel were employees of Degussa, the others were external inventors bound by an agreement (Burke and Dunican: University of Ireland/ Nampoothiri: FZJülich GmbH / Dusch and Wehmeier: University of Bielefeld)

Burke-1 corresponds to Burke-5

Burke-1, -2 and -4 are co-owned with FZJülich GmbH and University of Ireland

Burke-3 is co-owned with University of Ireland

Dunican-1, -4 and -5 are co-owned with FZJülich GmbH and University of Ireland

Dunican-2 and -3 are co-owned with University of Ireland.

The rejection was maintained to require that the application be amended to name the parties of the joint research discussed above. This has been done in the present paper.

Reconsideration and Withdrawal of the rejections is requested.

The Examiner has also raised a new set of obviousness rejections citing primarily to Kikuchi, Shimizu, and Chang. The Matsui and Dunican citations are for aspects of the certain dependent claims. The reasoning of the rejection is as follows.

Kikuchi teaches producing L-amino acids in *E. coli* but not the inactivation of the poxB gene as in the claims. Shimizu teaches that acetate has a negative effect on cell growth and Chang teaches that poxB catalyzes acetate from pyruvate, it would have been obvious to inactive the poxB gene to minimize the production of acetate thereby increasing the production of L-amino acids (see the discussion bridging pages 4-5 of the Official Action).

Applicants respectfully disagree with the findings of fact and conclusion based thereon that give rise to each of the rejections.

Shimizu discloses that the cell growth inhibiting substances can be removed by controlling the acetate concentration so as to be at most 17g/l (Col. 4, lines 44-50). Therefore a concentration above 17g/l acetate inhibits the growth of E.Coli bacteria. So it is not true that Shimizu teaches generally that acetate inhibits growth of E. coli in culture, as indicated in the Office Action page 4 bottom to page 5 first line.

Chang, however, discloses that the feeble growth of modified bacteria is the result of the modification by inactivation of the pyruvat dehydrogenase complex by deletion of aceFE genes, so that the cells use the (energy consuming) pathway using the pyruvat oxidase complex (poxB). According to Chang this results in a worse growth with acetate, because

these mutations lead to cells which are only able to grow with the acetate which is generated with poxB (page 757, right col. bottom).

This phenomenon has nothing to do with an inactivation of cell growth by acetate. So Chang in fact does not *teach* that *acetate inhibits growth of E. coli in culture* as the examiner has generally stated in the Office Action cited above. Therefore there was no motivation for those skilled in the art to combine Shimizu and Chang. Such a combination is a result of a hindsight approach.

Chang further says that *it remains unclear why the growth of E. coli on the acetate produced by pyruvate oxidase is so feeble* and *that the role of these pathways in utilization of the acetate produced by pyruvate oxidase is under investigation* (page 762 last paragraph) which also indicates that the consequences of the genetic modifications were not predictable due to the complexity of biochemical regulation mechanisms.

Furthermore Chang does not use L-amino acid production strains but (modified) natural strains, which means that it cannot be concluded from alterations in natural strains which production relevant results might come out while making the same alterations in production strains.

Accordingly, the rejections applied are not tenable. It is requested that the rejections under 35 USC 103(a) citing (A) Kikuchi, Shimizu and Change; (B) references in (A) further in view of Matsui; (C) references in (A) further in view of Dunican be withdrawn.

To the rejections under the doctrine of obviousness-type double patenting (provisional or otherwise):

U.S. 10/794,417 and US 11/350,043 have been allowed. A terminal disclaimer is attached.

U.S. 10/812,315 and US 11/658,477 are pending. As stated in MPEP § 822.01: If the "provisional" double patenting rejection in the present application is the only rejection remaining, the examiner should then withdraw that rejection and permit the present application to issue as a patent, thereby converting the "provisional" double patenting rejection in the other application(s), if applicable, into a double patenting rejection at the time the present application issues as a patent.

Should the Examiner wish to discuss any aspect of this application, he is invited to contact the Applicants' undersigned representative.

Respectfully submitted,

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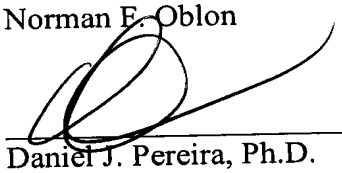

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